KPDES FORM C

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, contact KPDES Branch, (502) 564-3410.

Name of Facility: **Trace Fork Surface Mine**	County: **Knott**							
I. OUTFALL LOCATION	AGENCY USE							

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall No. (list)	LATITUDE			LONGITUDE			RECEIVING WATER (name)
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
BS12	**37**	**15**	**37**	**83**	**00**	**18**	**Trace Fork**
BS13	**37**	**15**	**35**	**83**	**00**	**09**	**Trace Fork**
BS14	**37**	**15**	**43**	**83**	**00**	**04**	**Trace Fork**
BS15	**37**	**15**	**49**	**83**	**00**	**07**	**Trace Fork**
BS16	**37**	**15**	**59**	**83**	**00**	**09**	**Trace Fork**
BS17	**37**	**16**	**05**	**83**	**00**	**13**	**Trace Fork**
BS18	**37**	**16**	**13**	**83**	**00**	**15**	**Trace Fork**
BS19	**37**	**16**	**21**	**83**	**00**	**19**	**Trace Fork**
BS20	**37**	**16**	**25**	**83**	**00**	**18**	**Trace Fork**

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfall. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

OUTFALL NO. (list)	OPERATION(S) CONTRIBUTING FLOW		TREATMENT	
	Operation (list)	Avg/Design Flow (include units)	Description	List Codes from Table C-1
BS12	**Surface runoff**	**18.11 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS13	**Surface runoff**	**21.38 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS14	**Surface runoff**	**24.71 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS15	**Surface runoff**	**22.05 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS16	**Surface runoff**	**23.92 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS17	**Surface runoff**	**29.47 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS18	**Surface runoff**	**26.73 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS19	**Surface runoff**	**34.54 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**
BS20	**Surface runoff**	**83.63 cfs (peak)**	**Sedimentation**	**1-U**
			Discharge to surface water	**4-A**

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES (Continued)

C. Except for storm water runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ Yes (Complete the following table.) ☒ No (Go to Section III.)

OUTFALL NUMBER (list)	OPERATIONS CONTRIBUTING FLOW (list)	FREQUENCY		FLOW				
		Days Per Week (specify average)	Months Per Year (specify average)	Flow Rate (in mgd)		Total volume (specify with units)		Duration (in days)
				Long-Term Average	Maximum Daily	Long-Term Average	Maximum Daily	

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ Yes (Complete Item III-B) List effluent guideline category:

☒ No (Go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measures of operation)?

☐ Yes (Complete Item III-C) ☒ No (Go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents the actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

MAXIMUM QUANTITY			Affected Outfalls (list outfall numbers)
Quantity Per Day	Units of Measure	Operation, Product, Material, Etc. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any federal, state or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders and grant or loan conditions.

☐ Yes (Complete the following table) ☒ No (Go to Item IV-B)

IDENTIFICATION OF CONDITION AGREEMENT, ETC.	AFFECTED OUTFALLS		BRIEF DESCRIPTION OF PROJECT	FINAL COMPLIANCE DATE	
	No.	Source of Discharge		Required	Projected

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered 5-18.

D. Use the space below to list any of the pollutants (refer to SARA Title III, Section 313) listed in Table C-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

POLLUTANT	SOURCE	POLLUTANT	SOURCE
NONE			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you use or produce, or expect to use or produce over the next 5 years as an immediate or final product or byproduct?

☐ Yes (List all such pollutants below) ☒ No (Go to Item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharge of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

☐ Yes (Complete Item VI-C) ☒ No (Go to Item VII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail to the best of your ability at this time the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge of or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (Identify the test(s) and describe their purposes below) ☒ No (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address, and telephone number of, and pollutants analyzed by each such laboratory or firm below)

☐ No (Go to Section IX)

NAME	ADDRESS	TELEPHONE (Area code & number)	POLLUTANTS ANALYZED (list)
Geological Sciences and Laboratory, Inc.	3133 North Main Street Hazard, KY 41701	(606) 439-3373	Total Suspended Solids Antimony, Total Chromium, Total Nickel, Total Zinc, Total Sulfate pH Arsenic, , Total Copper, Total Selenium, Total Cyanide, Total Iron, Total Beryllium, Total Lead, Total Silver, Total Phenols, Total Hardness Manganese, Total Cadmium, Total Mercury, Total Thallium, Total

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Ronald B. Hall VP	276-679-7060
SIGNATURE Ronald B. Hall	DATE 6-27-08

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. (See instructions)

***The following tables include only those pollutants which are believed to be present in the sample or for which testing is required**

V. INTAKE AND EFFLUENT CHARACTERISTICS (Continued from page 3 of Form C) | **OUTFALL NO.**

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. No. of Analyses	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)			a. Concentration	b. Mass	a. Long-Term Avg. Value		b. No of Analyses
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Total Suspended Solids (TSS)	22						1	mg/L				
Flow (in units of MGD)	VALUE .0004		VALUE		VALUE		1	MGD		VALUE		
pH	MINIMUM 6.68	MAXIMUM 6.68	MINIMUM	MAXIMUM			1	STANDARD UNITS				

Part B - In the MARK "X" column, place an "X" in the Believed Present column for each pollutant you know or have reason to believe is present. Place an "X" in the Believed Absent column for each pollutant you believe to be absent. If you mark the Believed Present column for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						d. No. of Analyses	4. UNITS		6. INTAKE (optional)		
	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)			a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
			(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
Hardness (as $CaCO_3$)	X		80						1	mg/L				
Sulfate (as SO_4) (14808-79-8)	X		250						1	mg/L				
Iron, Total (7439-89-6)	X		0.98						1	mg/L				
Manganese, Total (7439-96-6)	X		0.57						1	mg/L				

Part C – If you are a primary industry and this outfall contains process wastewater, refer to Table C-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in the **Testing Required** column for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark this column (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in the **Believed Present** column for each pollutant you know or have reason to believe is present. Mark "X: in the **Believed Absent** column for each pollutant you believe to be absent. If you mark either the **Testing Required** or **Believed Present** columns for any pollutant, you must provide the result of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS															
Antimony Total (7440-36-0)	X			0.00						1	mg/L				
Arsenic, Total (7440-38-2)	X			0.00						1	mg/L				
Beryllium Total (7440-41-7)	X			0.00						1	mg/L				
Cadmium Total (7440-43-9)	X			0.00						1	mg/L				
Chromium Total (7440-43-9)	X			0.00						1	mg/L				
Copper Total (7550-50-8)	X			0.01						1	mg/L				
Lead Total (7439-92-1)	X			0.00						1	mg/L				
Mercury Total (7439-97-6)	X			0.00						1	mg/L				
Nickel, Total (7440-02-0)	X			0.00						1	mg/L				
Selenium, Total (7782-49-2)	X			0.00						1	mg/L				

Part C – Continued

1. POLLUTANT And CAS NO. (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. Testing Required	a. Believed Present	b. Believed Absent	a. Maximum Daily Value		b. Maximum 30-Day Value (if available)		c. Long-Term Avg. Value (if available)		d. No. of Analyses	a. Concentration	b. Mass	a. Long-Term Avg Value		b. No. of Analyses
				(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration	(2) Mass	
METALS, CYANIDE AND TOTAL PHENOLS (Continued)															
Silver, Total (7440-28-0)	X			0.00						1	mg/L				
Thallium, Total (7440-28-0)	X			0.00						1	mg/L				
Zinc, Total (7440-66-6)	X			0.01						1	mg/L				
Cyanide, Total (57-12-5)	X			0.00						1	mg/L				
Phenols, Total	X			0.00						1	mg/L				